

A Synonymic Catalogue of Diurnal Lepidoptera. By W. F. KIRBY. 8vo, pp. 690. London: Van Voorst, 1871.

THE Diurnal Lepidoptera have long been a favourite study, and at the present time, in this country at least, are receiving an amount of attention which has probably never been surpassed. Every quarter of the globe is being ransacked for novelties; and the results of numerous expeditions are being constantly made known through the pictorial works of Mr. Hewitson and Mr. Butler, as well as through the medium of the Proceedings and Transactions of those societies whose pages are open to such matter. At a time when most writers and collectors are striving only how they may increase the number of described species, it is a pleasure to find a man who will undergo the self-imposed drudgery of revising the whole subject with a view of putting the synonymy of the established species in proper accordance with modern ideas. And this is what Mr. Kirby has done in his recently published Catalogue of Diurnal Lepidoptera. He has carefully collated all the references to descriptions of the butterflies described since the time of Linnæus (very properly, we think, selecting the 12th edition of the 'Systema Naturæ' as his starting point) down to the date of the publication of his book (1871). So far as we can see, and the list of authors quoted whose works Mr. Kirby has consulted in whole or in part aids us in forming an opinion*, the literature of the Diurnal Lepidoptera has been pretty thoroughly searched; and this catalogue may be trusted with reasonable confidence as including a sufficiently accurate list of the described species for practical reference by future writers.

It will thus be seen that this work will be of very great service in arranging a cabinet and in the determination of species.

In the internal arrangement of his subject we think that Mr. Kirby has hardly been so successful. In his preface he says that it appeared to him that any arrangement of the species in each genus was better than an alphabetical one; here, we think, he was wrong, and that, had he adopted such an arrangement, several difficulties involving error would have been avoided. It is hardly to be supposed that Mr. Kirby should be autoptically acquainted with nearly all the species he was arranging; and we think we trace to Mr. Hewitson and Mr. Butler, whose aid he frankly acknowledges, the criticisms respecting the validity of many species scattered throughout his pages. To the former we attribute the free use of the term "variety," and to the latter the minute specific subdivisions by which all his work is characterized. These two systems, if such they are, cannot be made to work harmoniously in the same book; and this we think Mr. Kirby ought to have seen.

* Mr. Kirby marks the names of the authors the whole of whose works he has consulted with an asterisk (*), those which he has seen only in part thus †; he omits to tell us the state of his knowledge concerning those works which bear no special mark at all.

We next come to the treatment of genera; and here Mr. Kirby has made a conscientious attempt to introduce order into an extremely complex and unsatisfactory subject. But we cannot help thinking that in many of the changes made an overstrained idea of justice to old authors has been kept in view rather than the interests of the living science.

The source of this, we think, is to be traced to the absolute indifference shown by Mr. Kirby as to whether a genus is intelligibly defined by its author or not. With him (and he does not stand alone) a genus is merely a name under which a greater or a less number of species are arranged, and the practical working of the system is that some one of such species is chosen as the type of the genus, and the student is left to find out its generic characters for himself! Space will not permit us to pursue this uninviting subject far; but we will quote one instance of a name changed by Mr. Kirby which will, we think, show how disadvantageously to the true interests of science the system he adopts may be made to work.

For a well-known genus [we were going to write of "*Erycinidæ*;" but this term is denied us] Mr. Kirby adopts Hübner's title *Euselasia*, proposed in 1816 with the following valueless definition:—"Alle Flügel oben zeichenlos, glatträndig; unten zierlich gezeichnet." In 1836 Boisduval gave the name *Eurygona* to an insect of the same genus, one side of the figure of which gives the formula of the neuration. This latter name was adopted by Mr. Westwood in the 'Genera of the Diurnal Lepidoptera,' where a full and elaborate description of the genus is given. According to Mr. Kirby's method, if we want to find the generic characters of this group, what is the process? After rejecting Hübner's definition as absolutely worthless, we must turn to the 'Genera,' and then having found all we want, we are still to reject the name there used! But the change does not stop here, for Mr. Kirby forbids us to use Mr. Bates's subfamily name *Eurygoninæ*, proposed in an exhaustive catalogue of the species of this family, and thrusts *Euselasia* again before our eyes in the form of *Euselasiinae*. Without defending the use made in the 'Genera' of some of Hübner's names, we still think that the estimate then made of the 'Verzeichniss bekannter Schmetterlinge' was a proper one, and that to many of Hübner's names the courtesy attaching to manuscript names was alone due. The obligation to use them ought not to be imperative; and they certainly ought not to be made to supersede well-characterized generic titles.

In closing these remarks we will only call attention to one other matter which we cannot help thinking also shows a certain amount of misapprehension as to the nature of genera. Mr. Kirby, in the first rule he imposes upon himself, says, "The name of every homogeneous genus, if not a synonym, or previously used in zoology or botany, should be retained for some part of it."

This rule has puzzled us much; and we are at a loss to discover what its meaning is; for if a genus is homogeneous, it appears to us that the necessity, nay, even the possibility of dividing it ceases to exist.